

What is claimed is:

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- 1. A method for decontaminating or disinfecting a TSE infected sample or material comprising heating the sample or material in a wet environment to a temperature above about 100°C for a time period of less than about 1 minute, wherein the integrity of said sample or material is substantially preserved.
- 2. The method of claim 1, wherein the sample or material is heated to a temperature above about 121°C.
- 3. The method of claim 1, wherein the sample or material is heated to a temperature of about 100°C to about 150°C.
- 4. The method of claim 1, wherein the sample or material is heated to a temperature of about 100°C to about 140°C.
- 5. The method of claim 1, wherein the time period is less than about 30 seconds.
- 6. The method of claim 1, wherein the time period is about 3 to about 15 seconds.
 - 7. The method of claim 1, wherein the time period is about 4 seconds.
 - 8. The method of claim 1, wherein the decontaminating or disinfecting is performed substantially in the absence of air.
 - 9. The method of claim 1, wherein the sample is heated to about 140°C for about 4 seconds.
- 10. A method for decontaminating or disinfecting or inactivating a TSE infectivity in a sample or material comprising contacting the sample or material with a solution of about 0.1N or greater alkali hydroxide ions for a time period ranging from about 30 seconds to about 10 minutes to decontaminate or



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disinfect or inactivate the infectivity in said sample or material.

- 11. The method of claim 10, wherein said alkali hydroxide is sodium hydroxide.
- The method of claim 10, wherein said sodium hydroxide is from about 0.1N to about 2N.
 - 13. The method of claim 10, wherein the time period is less than about 2 minutes.
- 10 14. The method of claim 10, wherein the time period is about 30 seconds to about 2 minutes.
 - 15. The method of claim 10, wherein the time period is about 30 seconds.
- 15 16. The method of claim 15, wherein said solution is about 1N sodium hydroxide.
 - 17. The method of claim 10, wherein the method is carried out at about room temperature.
- The method of claim 10, wherein said solution is about 0.1N or higher sodium hydroxide and said time period is less than about 2 minutes.
 - 19. A method for decontaminating, inactivating or disinfecting a TSE infectivity in a sample or material comprising:
 - i) contacting the sample or material with a solution of about 0.1 N or greater alkali hydroxide ions for a time period ranging from about 30 seconds to about 10 minutes; and

heating the sample or material in a wet environment to a temperature above about 100°C for a time period sufficient to decontaminate, inactivate or disinfect said sample or material.

20. A method for decontaminating, inactivating or disinfecting a TSE infectivity in



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a sample or material comprising

i) contacting the sample or material with a solution of alkali hydroxide ions; and

heating the sample or material in a wet environment to a temperature above about 100°C for a time period of less than about 1 minute to decontaminate, inactivate or disinfect said sample or material.

- 21. A method for detecting or isolating a PrP^{res} signal from a sample comprising:
 - i) adding a protease in the presence of detergent to a PrP^{res} containing sample to digest PrP^c present in the sample but not PrP res;
 - ii) denaturing PrPres remaining in the sample after digestion;
 - iii) applying the resultant solution to a resin; and
 - iv) eluting the PrP^{res} signal from the resin.
- The method of claim 21, wherein prior to adding a protease, the sample is extracted with an ionic detergent.
 - 23. The method of claim 22, wherein the ionic detergent is SDS or Sarkosyl.
 - 24. The method of claim 22, wherein the amount of detergent is as little as 0.1%.
 - 25. The method of claim 21, wherein the protease is _____, ____ or proteinase K.
 - 26. The method of claim 21, wherein denaturing is performed by boiling.
 - 27. The method of claim 21, wherein prior to applying the solution to a resin, the solution is diluted.
- The method of claim 21, wherein the resin is Protein G or Protein A.
 - 29. The method of claim 21, wherein the resin is Protein A conjugated to an anti-



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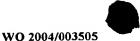
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PrP antibody.

- 30. The method of claim 21, wherein a Western blot is performed after the eluting step.
- 31. The method of claim 10 wherein the integrity of said sample or material is substantially preserved.
- 32. The method of claim 19 wherein the integrity of said sample or material is substantially preserved.
- 33. The method of claim 20 wherein the integrity of said sample or material is substantially preserved.
- 34. Apparatus for decontaminating or disinfecting a TSE infected sample material, comprising
 - a capillary storage tube having a first end with a first coupling and a second end with a second coupling;
 - a first syringe for collecting a sample of TSE infected material through a first needle, the first needle being removable and replaceable by a tube terminating in a needle coupling connectable to the first coupling of the capillary storage tube for injecting the TSE sample into the capillary storage tube;
 - a bridging capillary connected to the second coupling for receiving excess sample;
 - a second syringe for filling with water and for attachment to the bridging regulator capillary;
 - a back pressure regulator for attachment to the bridging regulator capillary after the storage capillary has been charged with water from the second syringe;
 - a trap attachable to the low pressure side of the back pressure regulator;
 - an overflow capillary tube of a length to contain a displaced portion of the TSE sample, the overflow capillary tube being coupled to the first coupling upon disconnecting the first syringe therefrom, the overflow capillary tube having a third coupling, and

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a thermocouple for attachment to the third coupling of the overflow capillary tube; the thermocouple having a sensor lead extending through the overflow capillary tube and into a portion of the capillary storage tube until the TSE sample rises to a preselected level in the overflow capillary tube, wherein the thermocouple senses the temperature of the TSE sample in the capillary storage tube upon applying a heat pulse to the capillary storage tube to disinfect the TSE infected sample materials in the capillary storage tube.

- 35. The apparatus of claim 34 wherein the capillary storage tube is configured as a coil.
- 36. The apparatus of claim 35 wherein the capillary storage tube configured as a coil is stabilized by an axially extending rigid rod welded thereto.